



#2

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

10/518,601
PCT
12-28-04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

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Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/518,001

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>.<223> section that some may be missing
- 6 PatentIn 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>.<223> section to be missing from amino acid sequence(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>.<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>.<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO X (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS (Do not insert any subheadings under this heading.)
(xi) SEQUENCE DESCRIPTION SEQ ID NO X (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES" response to include the skipped sequences.
- 8 Skipped Sequences (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>.<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <21> Response Per 1.823 of Sequence Rules, the only valid <21> responses are Unknown, Artificial Sequence, or scientific name (Genus/species). <220>.<223> section is required when <21> response is Unknown or is Artificial Sequence.
- 11 Use of <220> Sequence(s) 2,4,6,8,10,12,14,16,18,20,22,24,26,35,36 missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <21> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



PCT

RAW SEQUENCE LISTING

DATE: 12/28/2004

PATENT APPLICATION: US/10/518,001

TIME: 11:47:34

Input Set : D:\Protamil

Output Set: N:\CRF4\12282004\J518001.raw

3 <110> APPLICANT: EBL GmbH
 5 <120> TITLE OF INVENTION: Method for the production of protamine
 7 <130> FILE REFERENCE: Protamin
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/518,001
 C--> 10 <141> CURRENT FILING DATE: 2004-12-14
 12 <160> NUMBER OF SEQ ID NOS: 36
 14 <170> SOFTWARE: PatentIn Ver. 2.1

Does Not Comply
 Corrected Diskette Needed

ERRORED SEQUENCES

42 <210> SEQ ID NO: 2
 43 <211> LENGTH: 33
 44 <212> TYPE: PRT
 45 ~~213~~ ORGANISM: Oncorhynchus mykiss
 46 ~~223~~ OTHER INFORMATION: aa sequence derived from ORF of nucleotide
 47 sequence

OK 49 <400> SEQUENCE: 2
 50 Met Pro Arg Arg Arg Arg Ser Ser Ser Arg Pro Val Arg Arg Arg Arg
 51 1 5 10 15
 53 Arg Pro Arg Val Ser Arg Arg Arg Arg Arg Arg Gly Gly Arg Arg Arg
 54 20 25 30
 56 Arg

87 <210> SEQ ID NO: 4
 88 <211> LENGTH: 33
 89 <212> TYPE: PRT
 90 ~~213~~ ORGANISM: Oncorhynchus mykiss
 91 ~~223~~ OTHER INFORMATION: aa sequence derived from ORF of nucleotide
 92 sequence

OK 94 <400> SEQUENCE: 4
 95 Met Pro Arg Arg Arg Arg Ser Ser Arg Pro Pro Val Arg Arg Arg Arg
 96 1 5 10 15
 98 Arg Pro Arg Val Ser Arg Arg Arg Arg Arg Arg Gly Gly Arg Arg Arg
 99 20 25 30
 101 Arg

132 <210> SEQ ID NO: 6
 133 <211> LENGTH: 33
 134 <212> TYPE: PRT
 135 ~~213~~ ORGANISM: Oncorhynchus mykiss
 136 ~~223~~ OTHER INFORMATION: aa sequence derived from ORF of nucleotide
 137 sequence

OK 139 <400> SEQUENCE: 6
 140 Met Pro Arg Arg Arg Arg Ser Ser Arg Arg Pro Val Arg Arg Arg Arg

pls insert <220> Feature,
 whenever <221>, <222>
 or <223>
 is shown.

pls insert <220>, whenever
 <221>, <222> or <223>
 is shown.

See
 item
 # 11

on error
 summary sheet.

RAW SEQUENCE LISTING

DATE: 12/28/2004

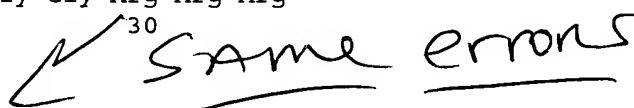
PATENT APPLICATION: US/10/518,001

TIME: 11:47:34

Input Set : D:\Protamil

Output Set: N:\CRF4\12282004\J518001.raw

(all)



141 1 5 10 15
 143 Arg Pro Arg Val Ser Arg Arg Arg Arg Arg Arg Gly Gly Arg Arg Arg
 144 20 25 30
 146 Arg
 177 <210> SEQ ID NO: 8
 178 <211> LENGTH: 33
 179 <212> TYPE: PRT
 180 <213> ORGANISM: Oncorhynchus mykiss
 181 <223> OTHER INFORMATION: aa sequence derived from ORF of nucleotide
 182 sequence
 184 <400> SEQUENCE: 8
 185 Met Pro Arg Arg Arg Arg Ser Ser Ser Arg Pro Val Arg Arg Arg Arg
 186 1 5 10 15
 188 Arg Ala Arg Val Ser Arg Arg Arg Arg Arg Arg Gly Arg Arg Arg Arg
 189 20 25 30
 191 Arg
 222 <210> SEQ ID NO: 10
 223 <211> LENGTH: 33
 224 <212> TYPE: PRT
 225 <213> ORGANISM: Oncorhynchus mykiss
 226 <223> OTHER INFORMATION: aa sequence derived from ORF of nucleotide
 227 sequence
 229 <400> SEQUENCE: 10
 230 Met Pro Arg Arg Arg Arg Ser Ser Ser Arg Pro Val Arg Arg Arg Arg
 231 1 5 10 15
 233 Arg Pro Arg Val Ser Arg Arg Arg Arg Arg Arg Gly Arg Arg Arg Arg
 234 20 25 30
 236 Arg
 267 <210> SEQ ID NO: 12
 268 <211> LENGTH: 33
 269 <212> TYPE: PRT
 270 <213> ORGANISM: Oncorhynchus keta
 271 <223> OTHER INFORMATION: aa sequence derived from ORF of nucleotide
 272 sequence
 274 <400> SEQUENCE: 12
 275 Met Pro Arg Arg Arg Arg Ser Ser Ser Arg Pro Val Arg Arg Arg Arg
 276 1 5 10 15
 278 Arg Pro Arg Val Ser Arg Arg Arg Arg Arg Arg Gly Gly Arg Arg Arg
 279 20 25 30
 281 Arg
 312 <210> SEQ ID NO: 14
 313 <211> LENGTH: 33
 314 <212> TYPE: PRT
 315 <213> ORGANISM: Oncorhynchus mykiss
 316 <223> OTHER INFORMATION: nucleotide sequence derived from amino acid
 317 sequence
 319 <400> SEQUENCE: 14
 320 Met Pro Arg Arg Arg Arg Ser Ser Ser Arg Pro Val Arg Arg Arg Arg
 321 1 5 10 15

RAW SEQUENCE LISTING

DATE: 12/28/2004

PATENT APPLICATION: US/10/518,001

TIME: 11:47:34

Input Set : D:\Protamil

Output Set: N:\CRF4\12282004\J518001.raw

same errors

323 Arg Ala Arg Val Ser Arg Arg Arg Arg Arg Arg Gly Gly Arg Arg Arg
 324 20 25 30

326 Arg

354 <210> SEQ ID NO: 16

355 <211> LENGTH: 31

356 <212> TYPE: PRT

357 ~~<213>~~ ORGANISM: Oncorhynchus mykiss

358 ~~<223>~~ OTHER INFORMATION: nucleotide sequence derived from amino acid ,
 359 sequence

OK 361 <400> SEQUENCE: 16

362 Met Pro Arg Arg Arg Arg Ala Ser Arg Arg Val Arg Arg Arg Arg Arg

363 1 5 10 15

365 Pro Arg Val Ser Arg Arg Arg Arg Arg Gly Gly Arg Arg Arg Arg

366 20 25 30

393 <210> SEQ ID NO: 18

394 <211> LENGTH: 31

395 <212> TYPE: PRT

396 ~~<213>~~ ORGANISM: Oncorhynchus mykiss

397 ~~<223>~~ OTHER INFORMATION: nucleotide sequence derived from amino acid
 398 sequence

OK 400 <400> SEQUENCE: 18

401 Met Pro Arg Arg Arg Arg Ala Ser Arg Arg Ile Arg Arg Arg Arg Arg

402 1 5 10 15

404 Pro Arg Val Ser Arg Arg Arg Arg Arg Gly Gly Arg Arg Arg Arg

405 20 25 30

435 <210> SEQ ID NO: 20

436 <211> LENGTH: 33

437 <212> TYPE: PRT

438 ~~<213>~~ ORGANISM: Oncorhynchus mykiss

439 ~~<223>~~ OTHER INFORMATION: nucleotide sequence derived from amino acid
 440 sequence

OK 442 <400> SEQUENCE: 20

443 Met Pro Arg Arg Arg Arg Ser Ser Ser Arg Pro Ile Arg Arg Arg

444 1 5 10 15

446 Arg Arg Pro Arg Val Ser Arg Arg Arg Arg Arg Gly Gly Arg Arg Arg

447 20 25 30

449 Arg

477 <210> SEQ ID NO: 22

478 <211> LENGTH: 31

479 <212> TYPE: PRT

480 ~~<213>~~ ORGANISM: Clupea harengus

481 ~~<223>~~ OTHER INFORMATION: nucleotide sequence derived from amino acid
 482 sequence

OK 484 <400> SEQUENCE: 22

485 Met Pro Arg Arg Arg Thr Arg Arg Ala Ser Arg Pro Val Arg Arg Arg

486 1 5 10 15

488 Arg Pro Arg Arg Val Ser Arg Arg Arg Arg Ala Arg Arg Arg Arg

489 20 25 30

518 <210> SEQ ID NO: 24

RAW SEQUENCE LISTING

DATE: 12/28/2004

PATENT APPLICATION: US/10/518,001

TIME: 11:47:34

Input Set : D:\Protamil

Output Set: N:\CRF4\12282004\J518001.raw

519 <211> LENGTH: 32

520 <212> TYPE: PRT

521 <213> ORGANISM: Clupea harengus

522 <223> OTHER INFORMATION: nucleotide sequence derived from amino acid
sequence

525 <400> SEQUENCE: 24

526 Met Ala Arg Arg Arg Arg Ser Arg Arg Ala Ser Arg Pro Val Arg Arg

527 1 5 10 15

529 Arg Arg Pro Arg Arg Val Ser Arg Arg Arg Arg Ala Arg Arg Arg Arg

530 20 25 30

559 <210> SEQ ID NO: 26

560 <211> LENGTH: 32

561 <212> TYPE: PRT

562 <213> ORGANISM: Clupea harengus

563 <223> OTHER INFORMATION: nucleotide sequence derived from amino acid
sequence

566 <400> SEQUENCE: 26

567 Met Ala Arg Arg Arg Arg Ser Ser Ser Arg Pro Ile Arg Arg Arg Arg

568 1 5 10 15

570 Pro Arg Arg Arg Thr Thr Arg Arg Arg Arg Ala Gly Arg Arg Arg Arg

571 20 25 30

803 <210> SEQ ID NO: 35

804 <211> LENGTH: 22

805 <212> TYPE: PRT

806 <213> ORGANISM: Artificial Sequence

W--> 807 <220> FEATURE:

807 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning

808 sequence for expression of Protamine

810 <400> SEQUENCE: 35

811 Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala

812 1 5 10 15

813 Ala Gln Pro Ala Met Ala

814 20

817 <210> SEQ ID NO: 36

818 <211> LENGTH: 33

819 <212> TYPE: PRT

820 <213> ORGANISM: Artificial Sequence

W--> 821 <220> FEATURE:

821 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning

822 sequence for expression of Protamine

824 <400> SEQUENCE: 36

825 Met Pro Arg Arg Arg Arg Ser Ser Ser Arg Pro Val Arg Arg Arg Arg

826 1 5 10 15

827 Arg Pro Arg Val Ser Arg Arg Arg Arg Arg Arg Gly Gly Arg Arg Arg

828 20 25 30

829 Arg

see item
11 on error
summary sheet

10/518,001

Page 5

<210> 13
<211> 102
<212> DNA
<213> Oncorhynchus mykiss

<220>
<221> CDS
<222> (1)..(99)

<220>
<223> nucleotide sequence derived from amino acid
sequence

<400> 13
atg ccc aga aga cgc aga tcc tcc agc cga cct gtc cgc agg cgc cgc 48
Met Pro Arg Arg Arg Arg Ser Ser Ser Arg Pro Val Arg Arg Arg Arg
1 5 10 15

cgc gca agg gtg tcc cga cgt cgt cgc agg aga gga ggc cgc agg agg 96
Arg Ala Arg Val Ser Arg Arg Arg Arg Arg Arg Gly Gly Arg Arg
20 25 30

cgt tag 102
Arg

pls explain "N" location.
See error explanation
on page 6.

The type of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

VARIABLE LOCATION SUMMARY

DATE: 12/28/2004

PATENT APPLICATION: US/10/518,001

TIME: 11:47:35

Input Set : D:\Protamil

Output Set: N:\CRF4\12282004\J518001.raw

Use of n's or Xaa's (NEW RULES):

Error Explanation: ✓

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.Seq#:13; N Pos. 54Seq#:15; N Pos. 21,30Seq#:17; N Pos. 21,30Seq#:21; N Pos. 27Seq#:23; N Pos. 30Seq#:27; N Pos. 30Seq#:28; N Pos. 9,12,18,42,57,78,81,93,96Seq#:33; Xaa Pos. 1,2,6,7,8,9,10,11,12,13,14,19,20,22,23,24,25,29,30,31,32Seq#:33; Xaa Pos. 36

VERIFICATION SUMMARY

DATE: 12/28/2004

PATENT APPLICATION: US/10/518,001

TIME: 11:47:35

Input Set : D:\Protamil

Output Set: N:\CRF4\12282004\J518001.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:49 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:2
L:94 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:4
L:139 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:6
L:184 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:8
L:229 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:10
L:274 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:12
L:304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:48
L:319 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:14
L:345 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:361 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:16
L:384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:400 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:18
L:442 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:20
L:468 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:484 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:22
L:507 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:525 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:24
L:566 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:26
L:584 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:27
L:584 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:27
L:584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:597 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:28
L:597 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:28
L:597 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
M:341 Repeated in SeqNo=28
L:729 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:33
L:729 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:33
L:729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
M:341 Repeated in SeqNo=33
L:807 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:35
L:810 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:35
L:821 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:36
L:824 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:36

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